



SPREAD SUNSHINE
Rs. 18 per year.

Sunshine

FEBRUARY — MARCH 1979

Rs. 2/-

sunshine

YOUTH MONTHLY WITH A WORLD VIEW
FOUNDED IN 1954

VOL. 25 NO. 7 & 8

FEBRUARY-MARCH 1979

PURPOSE

This Asian Youth Monthly is sponsored by the Children's Sunshine Concerns, a registered Non-profit educational Public Trust organized to ensure the all-round welfare of youth and to promote international understanding. SUNSHINE, founded in 1954, aims at fostering among boys and girls, 12-17, a democratic attitude, the service-above-self ideal, a sense of national unity and a world outlook. It also provides them with general knowledge, citizenship training, hints on efficiency and growing up, and appealing English language practice—all the pleasant way. It seeks to serve their age-equals abroad as a dependable bridge of friendship, and to meet the needs and interests of youth everywhere by giving them literature that is educative, edifying and entertaining.

FOUNDER-EDITOR

Dr. G. S. Krishnayya (1898-1967)
One-time Principal, Govt. Teachers' College, Belgaum; Educ. Attache, Indian Embassy, U.S.A.; Inspector of European Schools, Bombay State; Prof. of Education, Kolhapur & Mysore. Author of *Pathways to Prose and Poetry*, *Citizenship Training in School*, *The Rural Community and the School*.

POST-FREE SUBSCRIPTION RATES INDIA AND NEPAL

	For Schools	For Home
Yearly	Rs. 18	Rs. 12
Two Years	Rs. 34	Rs. 22

(Special Bulk Rate: Ten or more copies to a single address at Rs. 10 each.)

Payment should be sent by M.O/Postal Order/Bank Draft addressed to SUNSHINE, Poona

OTHERS

	Airmail	Seamail
Gulf Countries & U.K.	Rs. 45	Rs. 30
U.S.A.	Rs. 60	Rs. 30

Address: SUNSHINE, Poona, 411009, India
Phone: 470323

CONTENTS

	Page
EDITORIAL	
New Challenges for You	5

STORIES

Wind, Sand & Stars—Conclusion by <i>Antoine de Saint-Exupery</i>	8
CAPER by <i>Aunty Jane</i>	16
The Ten Farmers A Chinese Fairy Tale	27
Friendly Competition	30

ARTICLES

A Glimpse from MY LIFE by <i>Golda Meir</i>	10
Indian Classical Music—4 by <i>D.C.J.</i>	20
Cramming and Examinations	23

SCIENCE & TECHNOLOGY

The Homoeopathic Preparation by <i>Dr. Francis Rosario</i>	12
'SUNSHINE'—Answers to January Quiz	14

FEATURES

Let There Be Peace On Earth — A Song	6
SUNSHINE IYC CONTEST— Each One Interview One	7
Puzzles & Pastimes	24
English Lesson—REVISION	26
BY YOU: Young Writer's Section	28
Here & There	34
SUNSHINE-EAGLE FLASK QUIZ CONTEST—MATHEMATICS	35
You Ask-We Answer	36
Points Winners	38
Remember Cader— by <i>C. S. Anton Fernando</i>	41
Laughs	43
Penfriends	45
How Well Have You Read This Issue?	46

OUR COVER

This cover is designed by Belinda Viegas, 5614, from Govindram Seksaria Sc. College, Belgaum.

NEW CHALLENGES FOR YOU

WHILE you read this issue, your Editor is busy of course with the our Bumper Holiday number due out in the 1st week of April. This is likely to be a very special issue of **SUNSHINE** as we will be experimenting with generating some of it by using a computer!! An increase of over 15% in our printing bill in mid-January on top of an increase of 20% last January has caused us to look for some way of keeping down the cost of publication. Paper costs in 1978 are already nearly twice those of 1976, making it impossible for **SUNSHINE** to balance its books.

And, of course, we expect paper prices will continue to rise, making newspapers, magazines and books more and more costly. This is because only certain kinds of wood can be used for paper-making, and these are quite scarce already compared with a demand that is growing all over the world, and especially in the developing countries.

This is one of the predictions which is easy to make—but not for us to get used to. There are many more shortages of basic resources which will hit us one by one as time goes on.

In India one of the great challenges facing us is how we will provide fuel to the rural areas to cook with. No longer is cowdung enough, and in most parts of the country there are no trees which can be used as in the past. Some scientists suggest that community go-bar-gas plants for each hamlet are the only solution: richer farmers can take the gas to their homes in a container while poorer peasants can come and cook at the common kitchen in return for collecting and contributing a certain amount of cowdung or other agricultural waste material. Maybe solar

energy or wind electric generators will do the trick, but it is tomorrow's engineers and scientists who must find the answers. It is persons like you who must do it!

What are some of the other challenges which you can look forward to?

- The challenge of using electronics. Now that micro-electronic chips are so inexpensive how and where can they be used to make life easier? Could they perhaps be used in telephone circuits so that a single pair of wires to the exchange could be used for 2 or more phones? Or could they be used with a wind-powered electric generator which feeds power to your village when there is a breeze, but cuts in the regular grid when the wind is too low?
- The challenge of improving the efficiency of the way we use raw materials: for example 90% of sisal used for rope-making is thrown away! Yet this same fibre can be converted into many useful products.
- The challenge of finding productive work in the small towns for more people so that they need not come to cities and live in slums. This should be easy if we just tried to get more out of our agri-produce instead of treating it as "Waste" and burning it. Rice-husk, for example, or sugar cane stalks. Just think also of all the products that could be based on full utilization of animals, but which are today "manufactured" in cities!

As the energy crisis bites harder, as resources get scarcer, the opportunities for young people to contribute new ideas will become even greater.

—YOUR EDITOR

Let There Be Peace On Earth

Here is a meaningful song that you can sing with a suitable guitar or piano accompaniment. It also seems appropriate to be sung at school assembly.

The musical score is written on ten staves in G major (one sharp) and 4/4 time. The lyrics are written below the notes, with some words underlined to indicate phrasing. The score includes a key signature of one sharp (F#) and a common time signature (C). The lyrics are: Let there be peace on earth And let it be - gin with me, Let there be peace on earth, The peace that was meant to be With God as our Fa - ther, Broth - ers all are we, Let me walk with my broth - er In per - fect har - mo - ny Let peace be - gin with me, Let this be the mo - ment now, With ev - 'ry step I take, Let this be my sol - emn vow: To take each mo - ment and live each mo - ment in peace e - ter - nal - ly, Let there be peace on earth And let it be - gin with me, Let it be - gin with me.



SUNSHINE IYC CONTEST

EACH ONE INTERVIEW ONE

Have you ever wondered what it was like to be a child in a 'Mochhi's' family, or a child who has no place but the street to live on, or a child who works as a helper in a restaurant? There are hundreds of less well-off children than yourself, with hundreds of differing ways of life.

Get to know and talk to any one such child between the ages 10 and 15 years. Here are some areas about which you might question him or her depending on their situation.

We've given you some questions to get you started. One thing will lead to another, and we hope there will be a meaningful dialogue between you two. A point to remember: in all your questions be sure never to hurt your new friend's feelings by asking awkward questions.

1. *Daily Activities*—does he/she go to school—if not, why not? Did he ever go to school... why did he stop? What responsibilities does he have at home? Does he also have to work? Can he keep the money he earns, etc. etc.,

Think of the things that fill your daily life. It will help you think of a *lot* more questions.

2. *Family*—how many members are there in his family? What do they do? Do they have relatives who live with them or nearby, and whom they see often? Does he enjoy spending time with his family, or would he rather do something else? What are his friends like, What do they have in common?

3. *Entertainment*—what does he consider relaxation? What games does he like to play? Does his family have a radio? Who listens to it—what programmes do they enjoy? Ever seen T.V.? What does he enjoy in it? Does he go to films often? Who pays for the ticket, etc.

4. *Ambitions*—What does he think he will be doing when he finishes school or at age 16? What would he really like to do? What kind of responsibilities does he foresee when he is older? Does he look forward to finishing school?

Write a detailed, descriptive report of your talks together in not more than 500 words. Try and make the report come alive with as many quotations from your conversations as possible.

Five points to each of the five best entries.
Last date: May 5

WIND SAND & STARS

Antoine
de Saint-Exupery



The Story So Far:

In 1926 the author enrolled as a student pilot with the Latecoere Company, which is AIR FRANCE today. This Airline operated between Toulouse in Southern France to Dakar in French West Africa—carrying the mails. Of course, aeroplanes then were certainly not as sophisticated as the present ones, and each flight indeed was a challenge!

In 1935 St. Exupery decides to attempt a long-distance flight from Paris to Saigon. He took off on December 29 with his chief mechanic, Prevot.

They were in the air for four hours and five minutes when suddenly they CRASH. Miraculously, they are still alive, but the discovery that they are two hundred and fifty miles into the desert is shattering to both of them. They suffer from a great thirst ... then the mirages begin. ... It is a frustrating despairing situation.

Now read on ...

A man can go nineteen hours without water, and what have we drunk since last night? A few drops of dew at dawn. But the north-east wind is still blowing, still slowing up the process of our evaporation. To it also, we owe the continued accumulation of high clouds. If only they would drift straight overhead and break into rain! But it never rains in the desert.

I had an idea. 'Look here, Prevot. Let's rip up one of the parachutes and spread the sections out on the ground, weighed down with stones. If the wind stays in the same quarter till morning, they'll catch the dew and we can wring them out into one of the tanks.'

So we spread six triangular sections of parachute under the stars, and Prevot unhooked a fuel tank. This was as much as we could do for ourselves till dawn.

We collected an enormous quantity of water—perhaps as much as two quarts. I dipped my tin cup into the tank and brought up a beautifully yellow-green liquid for the first mouthful which really nauseated me.

I glanced at Prevot and saw him going round and round with his eyes fixed to the ground as if he was looking for something. Suddenly he leaned forward and began to vomit without interrupting his spinning. Half a minute later it was my turn. I was seized by such convulsions that I went down on my knees and dug my fingers into the sand.

After a time it passed and all I felt was a vague, distant nausea. But our last hope had fled. It was certain that we needed either another set of cloths or another receptacle.

Well, it was broad daylight and time we were on our way. This time we should strike out as fast as we could, leave this plateau, and tramp till we dropped in our tracks. I don't remember anything about that day. I remember only my haste. I was hurrying desperately towards something—towards some finality.

Our first day's nourishment had been a few grapes. In the next three days each of us ate half an orange and a bit of cake. If we had had anything left now, we couldn't have eaten it because we had no saliva, with which to masticate it. But I had stopped being hungry. Thirsty I was, yes, and it seemed to me that I was suffering less from thirst itself than from the effects of thirst. Gullet hard. Tongue like plaster of Paris. A rasping in the throat. A horrible taste in the mouth.

The previous day I had tramped without hope. Today the word 'hope' had grown meaningless. Today we were tramping simply because we were tramping. Probably oxen work for the same reason. Yesterday I had dreamed of a paradise of orange trees. Today, I would not give a button for paradise; I did not believe oranges existed. When I thought about myself I found in me nothing but a heart squeezed dry.

And yet, what was that? A ripple of hope went through me like a faint breeze over a lake. What was this sign that had awakened my instinct before knocking on the door of my consciousness? Nothing had changed, and yet everything was changed. This sheet of

sand, those low hummocks and sparse tufts of growth that had been a landscape, were now become a stage setting. Thus far the stage was empty, but the scene was set. I looked at Prevot. The same astonishing thing had happened to him as to me, but he was as far from guessing its significance as I was.

I swear to you that something is about to happen. I swear that life has sprung in this desert. I swear that this emptiness, this stillness, has suddenly become more stirring than a tumult on a public square.

'Prevot! Footprints! We are saved!'

'Look, Prevot, here two men stood together and then separated.'

'Here a camel knelt.'

'Here ...'

But it was not true that we were already saved. It was not enough to squat down and wait. Before long we should be past saving. Once the cough has begun, the progress made by thirst is swift.

We went on. Suddenly I heard a cock crow.

'Did you hear that?'

'What?'

'The cock.'

'Why ... why, yes, I did.'

To myself I said: 'Fool! Get it through your head! This means life!'

I had one last hallucination—three dogs chasing one another. Prevot looked but could not see them. However, both of us waved our arms at a Bedouin. Both of us shouted with all the breath in our bodies, and laughed for happiness. But our voices could not carry thirty yards. The Bedouin on his slow-moving camel had come into view from behind a dune.

The miracle had come to pass. He was walking towards us over the sand like a god over the waves.

* * *

The Arab looked at us without a word. He

 p. 37

IT isn't really important to decide when you are very young just exactly what you want to become when you grow up," I told them. "It is much more important to decide on the way you want to live. If you are going to be honest with yourself and honest with your friends, if you are going to get involved with causes which are good for others, not only for yourselves, then it seems to me that that is sufficient, and maybe what you will be is only a matter of chance."

These were the wise words with which the late Mrs. Golda Meir addressed the children of the school in America which she had attended when she was a little girl.

She was revisiting it at the age of 71 years and as Prime Minister of Israel.

We give below an extract from her autobiography *My Life*. Here she describes, what is in fact, the beginning of her public life when she was a student, 11 years of age. One can see here, that from her earliest youth, Golda Meir made herself available for any task that represented a mission. This was one of the reasons she was such a well-loved and respected leader. All her life she took care to practice herself what she preached to others, and she did only those things which she believed in with all her heart and soul. This was the source of her great power to persuade others.

A Glimpse from *My Life*

by Golda Meir

One important (to me) event took place when I was in the fourth grade. I got involved in my first "public work." Although school in Milwaukee was free, a nominal sum was charged for textbooks, which many of the children in my class could not afford. Obviously, someone had to do something to solve the problem, so I decided to launch a fund. It was to be my very first experience as a fund raiser, but hardly the last!

Regina, my good friend, and I collected a group of girls from the school, explained the purpose of the fund, and we all painted posters announcing that the American Young Sisters Society (we were particularly proud of the name we had made up for our non-existent organization) was to hold a public meeting on the subject of textbooks. Then, having appointed myself chairman of the society, I hired a hall and sent invitations out to the entire district. Today it seems incredible to me that anyone would agree to rent a hall

to a child of eleven but the meeting took place as scheduled one Saturday evening, and dozens of people came. The programme was very simple: I spoke about the need for all children to have textbooks whether they had money or not, and Clara, my sister, who was then about eight, recited a socialist poem in Yiddish. I can see her now, a very small red-headed child, standing in front of the audience in Packer Hall, gesturing dramatically as she declaimed. The result of the meeting was two-fold: A considerable amount of money (by our standards) was raised, and my parents showered praise on Clara and me while walking home that evening. I only wished that Sheyna, my older sister, had been there. But at least I could send her the clipping together with a picture of me, from a Milwaukee paper that referred to the meeting:

A score of little children who give their play-time and scant pennies to charity, and charity organized on their own initiative, too . . .

GOLDA MEIR

1898-1978

Born: Kiev 3-5-1898

Immigrated to USA in 1906

Educated: Teachers Seminary, Milwaukee (USA)



Immigrated to Israel in 1921; worked in agriculture at Merhavia (—1924); member of Women's Labour Council and Histadrut Executive (Federation of Labour Unions in Israel) since 1928; member of Zionist Action Committee, for some time Secretary of the Executive Committee of General Federation of Labour; head of Jewish Agency's Political Department.

Appointed Minister to the USSR 1948-49

Minister of Labour 1949-56

Minister for Foreign Affairs 1949-65; headed on several occasions Israel missions to UN General Assembly.

Formed Government of National Unity in December 1969.

On 26 February 1969 Golda Meir became the fourth Prime Minister of Israel.

And it is worthy of comment that this charity is itself a loud comment on the fact that little children may go to the public schools without proper provision of books. Think what that means . . .

The letter I wrote to Sheyna about the meeting was almost as dramatic as Clara's poem, "Dear Sister," it read, "Now I can tell you that we had the greatest success that there ever was in Packer Hall. And the entertainment was grand . . ."

My mother had begged me to write out

my speech, but it made more sense to me just to say what I wanted to say, what was in my heart. And considering it was my first public address, I think I did rather well. At any rate, with the exception of major policy statements at the United Nations or the Knesset (the Israeli Parliament), I never got into the habit of using a written text, and I went on for the next half century making "speeches from my head," as I described it to Sheyna in that letter I wrote her in the summer of 1909.

THINK AND WRITE

In the light of Golda Meir's words to the schoolchildren in America, write out in approximately 250 words a debate between a friend and yourself on the topic: **It is more important to live for others than for oneself.**

How are homoeopathic remedies prepared? And how does a homoeopath distinguish between one homoeopathic preparation and another?



THE HOMOEOPATHIC PREPARATION

by Dr. Francis Rosario

SINCE Dr. Samuel Hahnemann, the founder of homoeopathy, was himself an allopath, the drugs used in homoeopathy are the same drugs used by the allopaths. Therefore, strictly speaking, we cannot talk about homoeopathic drugs. The more correct thing to call them would be homoeopathic preparations.

When Dr. Hahnemann began his experiments in homoeopathy, he naturally used the drugs that were available to him as an allopath. He was making homoeopathic prescriptions with allopathic drugs. That is, he was now prescribing on the homoeopathic principle of like cures like. Incidentally, there are allopaths today, and even some homoeopaths, who make allopathic prescriptions with homoeopathic preparations. Because these doctors prescribe homoeopathic preparations, patients get the wrong impression that they are receiving homoeopathic treatment. Actually they are being given allopathic treatment. These doctors also prescribe allopathic drugs along with the homoeopathic preparations.

But let us go back to Dr. Hahnemann and his experiments. Dr. Hahnemann began prescribing on the principle of *like cures like*, but he used the same allopathic drugs in the usual dosage. The result was that the symptoms of the patient first got worse and then were

cured. In order to do away with this worsening aggravation of symptoms, Dr. Hahnemann started giving his patients smaller doses.

Gradually, Hahnemann developed a special process of preparing homoeopathic remedies. He called it *Potentisation*. This means that the drug was made more powerful, or that energy was added to the drug. Thus, through this process, the quality of the drug was reduced, while the power or energy of the drug was increased.

Hahnemann had probably heard how Indians atomised drugs. Atomisation means that the drug would be ground thoroughly or *trituated* in order to increase its curative powers. The Ayurvedic masters taught that by continuous grinding, the drugs acted more rapidly and deeply. Hahnemann modified the atomisation method to suit his own purposes. Nowadays, we read in advertisements how certain drugs are microfined to relieve pain faster.

Hahnemann taught his followers to prepare drugs according to two different scales, the decimal scale and the centesimal scale.

HOW A DRUG IS PREPARED

A drug may be prepared according to the

decimal scale. A drug (say sulphur) is mixed with sugar of milk in the proportion of one to ten. For example, 10 grains of sulphur is mixed with 90 grains of sugar of milk. This mixture is ground or triturated in three stages lasting 4 hours. Now we have the first power of sulphur or sulphur 1x. The number after the name of the drug indicates the power of the drug. And the x following the number means that it has been prepared according to the decimal scale.

To prepare Sulphur 2x, we take one part of sulphur 1x and add 9 parts of sugar of milk. This mixture is ground or triturated for 2 hours and thus we get Sulphur 2x. In this way we can continue increasing the power of the drug to 3x, 30x etc.

Similarly, homoeopathic remedies can be prepared according to the centesimal scale. To do this, 99 parts of sugar of milk is added to one part of the drug. Then the mixture is triturated. To indicate that a drug has been prepared in the centesimal scale, either the number only is written after the name of the drug, or the number is followed by the letter c. Thus, if the 30th power of sulphur has been prepared in this scale, it will be written either as Sulphur 30c or just as Sulphur 30.

All mineral substances, most chemical salts, animal substances, and certain vegetable drugs are prepared by trituration.

There are certain substances, such as lycopodium (club moss) and silica (common quartz) which are called *inert*. In their ordinary, normal state they have no medicinal properties, but when they are triturated they acquire curative powers.

Homoeopathic remedies can also be prepared in liquid form both in the decimal as well as centesimal scales. To do this, alcohol is used instead of sugar of milk. In the decimal scale, one part of the drug is mixed with nine parts of alcohol, and in the centesimal scale one part of the drug is mixed with 99 parts of alcohol. The mixture is then vigorously shaken.

Dr. Hahnemann discovered that certain

substances are insoluble and therefore they have to be triturated up to the 6th potencies. Beyond the 6th potency these medicines can be dissolved in alcohol and therefore liquid preparations can be made out of them. The liquid preparations are called *dilution* or *attenuations*.

Since the homoeopathic remedies are prepared with sugar of milk, children naturally like these medicines. Often when their parents are away, the children will eat the medicines as if they were just sweets. When parents return and discover what the children have done, they get worried and run to the doctor. The doctor then has to reassure the parents that nothing will happen to the children. The quantity of the drug in the homoeopathic preparation is too small and microscopic to do the child any harm at all. The homoeopathic preparation of the drug is quite safe. Children have eaten as much as half or even a full bottle of a homoeopathic preparation, and yet it has done them no harm.

By this process of potentisation the chemical properties of the drugs is so altered that they are no longer subject to chemical laws. In the higher potencies it is impossible to detect any drug through microscopic or chemical tests. However, Dr. William E. Boyd of Glasgow devised a special apparatus called the *Emanometer* by which it is possible to detect the activity of the homoeopathic potencies. Thus, it is possible to prove that the homoeopathic remedy is not just sugar, but contains drug energy which helps the patient's body to cure itself. Further research in this field is continuing.

From the foregoing, the reader will be able to answer for himself the question: *How does a homoeopath distinguish between remedies since they all look alike?* He cannot. The homoeopathic preparations have to be properly and carefully labelled. If the label is lost, it will not be possible to say what drug was prescribed.





'SUNSHINE'

Answers to SUNSHINE-EAGLE FLASK QUIZ CONTEST

JANUARY 1979

I. a. What is Sunshine or Sunlight? b. How is it measured? c. What do you understand by the term frequency of light? d. What is the speed of light?

a. Sunshine or Sunlight is energy transmitted by the Sun. The energy is in the form of electromagnetic radiation. It is the source of terrestrial illumination and heat as well as proteins for vegetable growth. Although we receive only a minute part (0.000,000,000, 005%) of the light of the sun, the energy contained in the Sunlight falling on the surface of the earth is equivalent to nearly 5,000,000 horse-power per square mile.

b. It is measured in energy units like watts, langbys, calories, etc.

c. Frequency is a characteristic of electromagnetic radiation. Visible light frequencies range from 10^{12} cycles per second or to 10^{15} cycles per second.

d. The speed of light is about 186,000 miles per second.

II. a. What is the relation between the Earth and the Sun? How far apart are they? b. What is the Solar System? c. What is a Galaxy? d. What are Sun Spots?

a. The Sun is the centre of the Solar System to which the Earth belongs. It is at a distance about 93,000,000 miles from the earth.

b. The Solar System in astronomy, is the group of heavenly bodies comprising of the Sun, the Planets, Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto which move around the sun, and the Satellites or Secondary Planets revolving

around the major planets, and therefore accompanying them in their revolution around the sun.

c. Powerful telescopes have revealed to us masses of stars, incredibly numerous and distant grouped together in clusters, at distances of hundreds of millions of light years. Each one, appearing as hazy patches of light in all but the most powerful telescopes, represents a Galaxy, with millions upon millions of stars. Our own Galaxy, the Milky Way, contains the Solar System and the stars.

d. Sunspots are marks that appear on the surface of the sun from time to time. They vary greatly in size and duration. Some are relatively small and short-lived, others cover many times that of the Earth's surface and persist for a month or so. As a spot grows it can be seen to consist of a dark centre—the *umbra*, and the lighter, outer part—the *penumbra*. Sunspots appear dark only because they are not quite so hot (about 4000° C) as the surrounding surface. Although they have been studied for years, sunspots remain a mystery.

III. a. What is the difference between a Planet and a Star? b. How can Solar Energy be used? Give four examples.

a. Stars are incandescent bodies, spherical in shape and of the same nature as our Sun. They give out heat and light, the products of atomic reactions going on inside them. The Sun is the only one that appears to us as a disc; the others are so far away, that even in the most powerful telescope they appear as points of light. The rays of light that come from so

far have no width, and are easily disturbed by the Earth's atmosphere. As a result, the stars seem to twinkle. They also appear to be stationary in the sky; actually they are moving at a colossal speed.

The nine planets together with the sun make up the Solar System.

b. Three broad categories of *large scale* applications of solar-power are:

1. The heating and cooling of residential buildings

2. The chemical and biological conversion of organic material to liquid, solid and gaseous fuels.

3. Conversion of solar energy to electricity.

Other applications are solar stills for distillation of water, solar dryers to dry grains and solar cookers for cooking.

IV. Is the Sun a Star? Explain what it is made of.

The Sun is a yellow star about half-way through its life, and is probably about 6,000,000,000 years old. It is an incandescent sphere composed of gas at a very high temperature. The Sun's immense heat is generated by nuclear reactions. Deep in the centre of the Sun, where temperature reaches 20,000,000°C. hydrogen atoms collide so violently that electrons and nucleus are torn apart to produce atoms of helium. Each time this happens energy is released in the form of heat and light. Something like 4,000,000 tons of the Sun is radiated away every second.

The visible part of the Sun, the intensively bright surface of white light is called the photosphere. Surrounding the photosphere is the chromosphere, a rarefied envelope of crimson gas. Beyond this is the outer layer of the Sun's atmosphere called the Corona composed of very rarefied gas, extending far into space.

V. Who were the first scientist/astronomers, who believed that the earth revolved around the Sun?

Till the time of Copernicus, it was generally assumed that the earth was at the centre of the universe. Over the centuries, unfortunately, the idea had become so firmly established that it was believed as a religious dogma and no one dared to question the truth of the belief. Born in 1473, Copernicus, a Polish Count, became interested in Astronomy. He did what no man since Greek times had dared to do—he removed the Earth from its cherished position in the middle of the universe. He considered the Sun as the Centre of the Solar System. He arranged the Earth and the five planets known at that time—Mercury, Venus, Earth, Mars, Jupiter and Saturn—in their proper order, and suggested that they moved in circular orbits around the Sun.

Tycho Brahe, the best observer of the time rejected Copernicus's idea. When he died his young assistant Johannes Kepler carried on the work. Kepler accepted that the Sun was the centre of the Solar System, and further assumed, after carefully studying Mars, that the Planets did not move in perfect circles, but in ellipses, a special kind of closed oval curve.

Contemporary with Kepler, was one of the greatest names in Astronomy, Galileo Galilei. Galileo made the world's first real telescope, which magnified thirty times. It surveyed the wonders of the heavens in the winter of 1609-10. Galileo now knew that the Earth and planets revolved around the Sun.

VI. Why is it hot at the Equator and cold at the Poles?

As you know, the Earth while revolving around the Sun, is also rotating on its own axis. However, the axis of the Earth is not perpendicular to the plane of its orbit; it is tilted at an angle of $13\frac{1}{2}^\circ$ from the vertical. The Sun sends us heat and light in rays which travel in straight lines. Their effect depends on two things. How long they shine on us, and at what angle they fall. If the Earth

 (over)

were a flat disc, every part of it would become equally hot, because the rays would fall on every part perpendicularly. But the earth is a sphere, and the Sun's rays fall perpendicularly only on one point on the surface at any particular time. As the Earth revolves, only a narrow belt along the line of the Equator—the tropics—ever receives the Sun's rays from directly overhead. The other rays fall obliquely and are spread over a larger area, thus warming it less. Hence the difference in climate between the Equator and the Poles.

VII. How and why are Day and Night caused?

The earth rotates on its own axis, from West to East, taking 24 hours to make one complete revolution. As the Sun is shining steadily at the Earth from one direction, every place on the Earth's surface in turn passes through the Sun's rays. The Sun only illuminates one half of the Earth at a time; the other half is in shadow.

VIII. What is a sun dial?

Sun dials are instruments used to measure time during the day. Time is measured with the help of the shadow cast by a rod or a column on a dial. As the sun moves across the sky, the length and angle of the shadow changes. This is calibrated on the sun dial to read the time.

IX. What is Surya namaskar?

Surya namaskar is a rhythmic exercise comprising of ten different postures done, sequentially. While performing it, the person faces east (i.e. faces the sun) and chants beej mantras between two postures. The postures are accompanied by controlled breathing.

X. What is (a) Sunstroke (b) Sunburn

a. Sunstroke is the condition of exhaustion due to prolonged exposure to the sun's rays or to excessive heat, marked by sudden prostration.

b. Sunburn is the condition of superficial inflammation of the skin caused by exposure to the rays of the sun.

A Fairy Tale



C

A

P

S

R

by Aunty Jane

CAPER thought his mother was perfectly beautiful. She had large, delicate ears which shone pink from the inside and was a nice comfortable shape for cuddling up to when one felt cold. Caper was a little fellow and he often felt cold; the forest at night was so very gloomy, with dew dropping from the trees streaking his fuzzy coat and making him shake as though he had a fever. Mother Sambar didn't mind, but then she never seemed to mind anything—the cold, the heat or the lack of grass when they were hungry.

Caper's father was dead. He had been killed by a shikari just after Caper was born and Mother Sambar had to look after Caper. She had told him the story often, how father was caught in a trap set along one of the jungle paths while he was looking for food one night, and although mother and he tried and tried to free his leg it was caught too tightly. Poor father, when he heard the shikaris coming

early in the morning, he sent mother away. She fled, hating the man smell, and dreading what must be happening to father. Later in the same day she went back to the trap. There was nothing there, just a few smudges of blood and some light brown hair and the hateful trap lying harmless with its jaws wide open.

Ever since then mother avoided that part of the forest where Caper had been born and travelled far away to another part of the jungle. There weren't many grassy glades and mother was finding it difficult to find enough grazing for the two of them. Caper was growing big and seemed to be perpetually hungry.

Caper stirred drowsily and opened his eyes. Mother was standing up, ears twitching, sniffing the evening air in great gulps.

"Come along, Caper," she murmured gently. "I can smell newly watered grass somewhere not too far away. We'll go and see, shall we?"

Mother and son moved through the forest, the adult sambar hardly stirring a leaf, Caper, living up to his name, jumping about on his tiny legs, nudging his mother in the side and butting her with his head for fun. Mother never scolded when he pretended to fight her. She said that as father was dead Caper would have to learn to stand up for himself, and as he was too small to fight anyone else he might as well practice on her!

Mother stopped every few minutes, making sure they were going in the right direction. Her big veined ears listened intently. She didn't say anything to Caper but she was always frightened they might stray into a panther's domain and Caper was too small to escape from trouble.

Suddenly a tiny deer mouse* started out from almost under their feet, giving Caper a nasty fright.

When he realized what it was he gasped in

*deer mouse—a name given to mice which are coloured like deer. They live in the woods and plains and build nests of grass and bark under rocks or logs.

relief. "Ho! Mr. Peggoty-top." "Where are you going in such a hurry?"

"Mr. Peggoty-top, indeed!" replied the deer mouse with a sniff. "Doesn't your mother teach you manners? I may be smaller than you but my size doesn't stop me feeling hungry and wanting my dinner!" He looked up at mother sambar. He went on. "I can see you are going my way. There is plenty of food for all of us close by—green peas, beans and carrot tops and the most delicious grass, just newly planted. Let us all go together; three are always better than one."

Mother sambar smiled to herself and nodded her head without speaking. Deer mice were notoriously greedy; capable of eating three times their weight in one night.

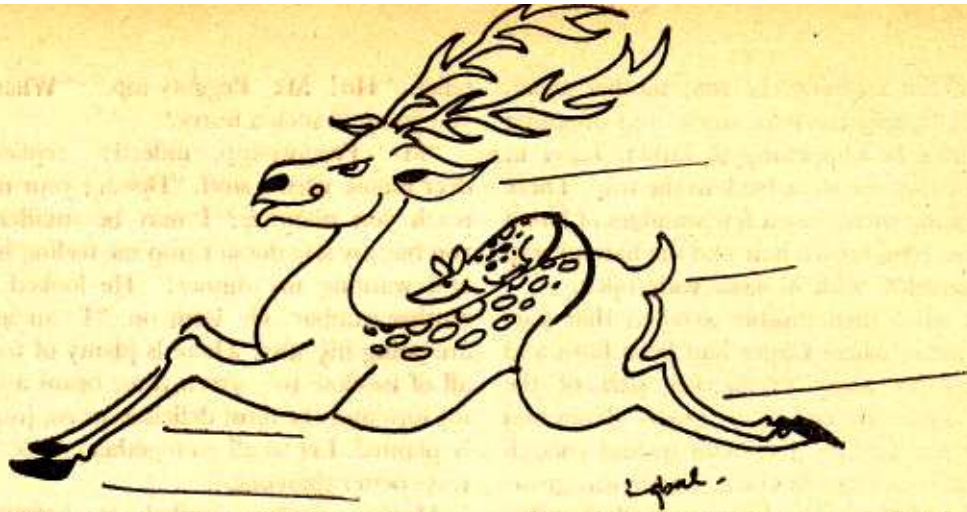
"Now, let me see," deer mouse was muttering to himself. "It was first right and then the second turning to the left, I seem to remember. Or was it second right and then the first to the left? Dear me, I shall forget my own name next!"

It didn't really matter, Caper thought, the smell of rich new grass and growing vegetables was getting stronger and stronger. Mother was flicking her tail impatiently. Caper could hear her stomach rumbling and his own belly felt as though it hadn't had a meal for a month!

Mr. Peggoty-top pranced along in front, leading the way importantly. His little legs were so short under his square round body that they had to work double time to keep ahead.

"S'not far'," he gasped, quite out of breath but determined not to be overtaken, and eager to show Caper and his mother he knew what he was talking about. "Just round the corner and through those trees and we're there."

Caper couldn't wait, or rather his tummy wouldn't let him. He rushed ahead, skidded down a sandy bank, fell in and out of a rather muddy stream bordered with sweet-smelling mint, and landed on all four feet in the middle of a big bed of bright orange flowers.



"Ohhh!!!" breathed mother sambar ecstatically. "Marigolds! Quite one of my most favourite meals!"

She stretched out her long neck and started munching away, nipping off the tops of the flowers expertly. Caper was too small to reach up and Mr. Peggoty-top could only scuttle about between the stems of the flowers squeaking loudly—

"PLEASE, oh please break off some for us too! I'm hungry, aren't you little 'un?"

Caper turned round looking for the "little 'un", there was no one else but him so he smiled politely and nudged his parent.

"I say, mother, let us have some too. I can smell how good they are from down here."

Mother didn't listen she was far too busy eating. Caper went all round the bed on a tour of inspection but it was no good, the flowers were right out of his reach.

"What shall we do, Mr. Peggoty-top?" he said wistfully. "Mother isn't going to help and I'm HUNGRY..."

"I know," squeaked Mr. Peggoty-top. "I've got an idea. Suppose you kneel down here right at the edge of the flower bed. I'll climb up on your back and nip off the marigold heads. But mind you stand still, little 'un, no tricks, I don't want to break a leg."

Caper thought this a very sensible idea. He knelt down obediently so that Mr. Peggoty-top could clamber onto his back and then stood up cautiously while the deer mouse dug all four feet into his rather knobby spine.

Hanging on shakily Mr. Peggoty-top leaned out cautiously and nipped off a particularly big marigold, munched it between his sharp little teeth and exclaimed—

"H'm, just a weeny touch of pepper. Delicious!"

"Hi!" called out Caper, sagging a little under Mr. Peggoty-top's weight. "What about me? Aren't you going to let me have a taste too?"

"Oh, I'm so sorry," apologised Mr. Peggoty-top profusely. "I quite forgot you are starving too!"

He quickly bit off about a dozen marigold heads, signalled to Caper to move along further and repeated his shearing. Then he hopped down off Caper's back and they both set to with enthusiasm.

"My, but aren't they good?" Caper mumbled, his mouth full. "Can't taste any pepper though, more like coriander seeds, I think."

Nobody listened, everyone was too busy filling his stomach. Within one hour the three of them had cleared two big beds of marigolds, leaving only forlorn-looking ragged stalks, had toyed with a few tender shoots of newly planted buffalo grass, and sampled the tops of some young carrots.

Stomachs bulging they trailed back into the forest the same way they had come, leaving their footprints for anyone to see. Very careless indeed! Caper, of course was too young to realise, mother was too full to care and Mr. Peggoty-top was so proud of making friends

with the aristocracy that he never thought about it at all.

But the owners of the marigolds and the carrots went to the forest officer to complain. He, poor fellow, was very puzzled.

"I just don't understand it," he kept saying. "Here they are, the slots of a big sambar and a small one, but what are the third's? They look like the footprints of a deer mouse, but every now and then they disappear, so they can't be. They must be a ghost's! I know that's not possible, but what else can they be?"

Caper could have told him. You see, after their first successful raid, he and his mother more or less adopted Mr. Peggoty-top as their mascot. They thought he was very clever and he seemed to know all the right places to look for food and was shrewd enough not to take them to the same place too often. He and Caper had worked out a beautiful scheme. When they were going a long distance, and as soon as he got tired, Mr. Peggoty-top would ask Caper to kneel down and give him a

piggy-back. While he sat serenely dozing, Caper would carry him for miles and miles and he became so used to his "armchair" that he never fell off even when Caper grew into a leggy young sambar and the earth seemed a long way down. Mr. Peggoty-top felt quite safe; in return for his daily rides he taught Caper philosophy and geography and they had very interesting conversations!

By and by a legend grew up that two sambars had a friendly spirit that protected them from the guns of the forest guards and even from the tigers and panthers living in the forests. Whenever the villagers saw the tiny foot-steps of a deer mouse running alongside the sambar tracks, they moved away and made a sign to protect themselves. Who knew for certain whether they were ghosts or real animals?

Only the wise old owls knew. They saw them moving quietly along the jungle paths and they never said anything: they were owls.



Dipoo enjoyed the trip, and Raju couldn't even go! Poor fellow! He was so disappointed! Dipoo saved his pocket money and gifts. He has a Bank Account with us. Raju does not! Raju you can also open an account with us and save for the next trip.



**bank of
maharashtra**
(A Govt of India Undertaking)
H. O. Pune.

PRAJAKTA

Indian Classical Music-4

by D. C. J.



IN this issue we shall talk about the musical instruments of India. It is not possible to describe all of them here for there are literally dozens, ranging from the 'primitive' *manjira* to the most 'sophisticated' ones like the *sitar* and *veena*. By the way, the words 'primitive' and 'sophisticated' are used here in the sense of musical breadth or versatility that an instrument can provide. On the *manjira*, which you must certainly have heard as an accom-



paniment to Bhajans, wedding songs and the like—if you have not, ask your grandma—one can play only a few musical notes. The Sitar, on the other hand, allows three octaves of twelve notes each, besides the gliding movement between notes called the *meend*.

Musical instruments can be classified into four categories: Solids, Percussion, Wind and String. Solids are instruments which use a hammering action to produce sounds like the *manjira* or cymbals, *jaltarang*, etc. *Jaltarang* is perhaps the only solid used in classical music. One can play a raga on this instrument. It consists of a number of porcelain cups, all filled with water to different levels. The musical note produced by a particular cup depends on its thickness, the exact composition of its material and the level of water in it. The musician strikes on the rim of the cup with bamboo-sticks to produce the desired note. There has to be one cup for each note of each octave to be played.

Percussion instruments used in India are of two types: those made from a single, round, hollow wooden block, covered with skin at both the ends, and those consisting of two separate hollow vessels covered with skin on top. *Dhol*, *Dholak*, *Pakhavaj* and *Mridangam* are examples of the first kind, while *Nagada* and *Tabla* are examples of the second type. Of these *Tabla* is the most popular in the *Hindustani* system, and *Mridangam* is the most

commonly used percussion instrument in the *Karnatic* style.



In Indian classical music percussions are used mainly as an accompaniment, to provide the *tala*, while another musician renders the *raga*. The *Pakhavaj*, the *Mridangam* and the right-hand drum of a *tabla* pair are all made of hollowed blocks of wood. The left hand drum of a *tabla* pair is made from clay, steel, brass or copper. A round patch of flour paste is stuck to the left side of a *Pakhavaj* and *Mridangam* and is scraped off after each performance. This helps in adjusting the pitch of the instrument. On top of both the drums of *tabla*, and on the right hand end of the *Pakhavaj* and *Mridangam*, a permanent black patch is stuck. It is called *syahi* or *soru* and gives a certain richness or depth to the sound of these instruments. In all of these instruments leather strips are fastened from one end to the other with small wooden blocks inserted between these strips and the body of the instrument. The instrument can be tuned by sliding these blocks up or down, as also by pushing the rim of the skin-covering with a hammer.

Each of these instruments has a 'vocabulary' of sounds that can be produced on them. These sounds are called *boles* by Hindustani musicians and *sollu* by *Karnatic* musicians.

Wind instruments are those in which the musical notes are produced by blowing air through some kind of constriction. Popular wind instruments in India are the *Bansuri* or *flute*, the *Shehnai* and the *Nadaswaram*.

The flute is made of a hollow bamboo tube of varying lengths and diameters. A me-

dium-sized flute is about eighteen inches long and about three-quarters of an inch in diameter. One end of the tube is closed and the instrument is played by blowing into a hole near the closed end while the instrument is held horizontally in front of the lips. There are another six to eight holes along the length of the flute. Musical notes are played by closing or opening these holes with the fingers while blowing wind into the instrument. It is a popular instrument in both the *Hindustani* and the *Karnatic* systems. One can play a *raga* on a flute.

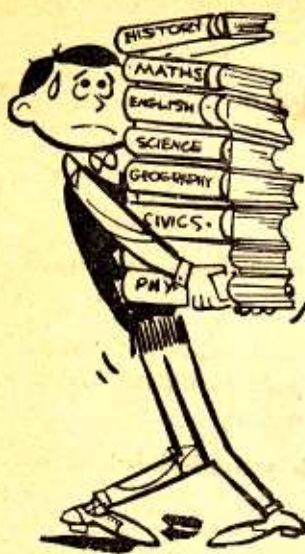
Shehnai in *Hindustani* music and *Nadaswaram* in *Karnatic* music are the two other popular wind instruments. Both are made of hollow, black wood tubes, which flare toward the end. *Shehnai* has a single detachable reed at the narrow end, and seven to nine holes along the length. The *Nadaswaram* uses two detachable reeds and has twelve holes along the length. Both the instruments are played by blowing into the reed. On both of these instruments one plays a *raga*. *Nadaswaram* is louder and less melodious than *Shehnai* which has a very delicate, haunting quality. A drone, played on an identical instrument but with only two or three holes, always accompanies both *Shehnai* and *Nadaswaram*.

String instruments are perhaps the most popular concert instruments in India. The *Sitar*, the *Veena*, the *Sarod*, the *Sarangi*, the *Bela* or *Violin* and *Santoor* are all string instruments. There are also a number of others, like the *Sur Bahar*, the *Rudra Veena* and the *Vichitra Veena*.

String instruments can be further divided into three broad categories: those played with a bow like the *Sarangi* and the *Violin*, those played by plucking the strings like the *Sitar*, the *Sarod* and the *Veena*, and those played by 'striking' the strings like the *Santoor*.

Each of these instruments has a resonance box of some kind to resonate the notes produced on the string.

We shall talk about some of these string instruments in our next issue.



CRAMMING AND EXAMINATIONS

CRAMMING is what most of us do in a frantic, last-minute effort to memorise masses of material which should have been learned during the year. This is definitely harmful since the bits and pieces of information we acquire in this manner are not only confused but also quickly forgotten. *Cramming is no substitute for faithful, daily work during the year.*

Here are two important rules to help you to begin revising for the exams:

1. Get a skeleton view of the subject; jot down the main ideas and then think how the details are to be organized under them. Avoid memorizing scattered details.
2. Give yourself plenty of time for revising. Begin revising a subject about a week or two before the examination. Leave only a few finishing touches for the day before the exam. Avoid last-minute revision. This is often the reason why students start an exam in a very confused and scared frame of mind.

Helpful hints for preparing and taking examinations:

1. Find out from the teacher the nature

of the examination and the topics it will cover.

2. Think over the kinds of questions which will probably be asked—and plan how to answer them. What has the teacher stressed during the year and in previous examinations?
3. When the examination period comes you should be well rested and remain calm. Remember that teachers give examinations to test your knowledge of the subject, and that students who have a good grasp of the subject will not have to fear.
4. Do not start writing as soon as the Question Paper is in your hands. First read the general instructions pertaining to the examination as a whole. Then slowly read over the whole set of examination questions and think about each one long enough to understand it.
5. Read each question very carefully before beginning to answer it. Make certain that you have the real point of the question. Plan your answer and provide time for all the questions. Do not leave out any question.
6. Make mental or written outlines of your answers. This will help you immensely in giving a complete answer to each question. A well-written answer convinces the teacher that you have mastered the subject.
7. Reserve time, at the end, to go over your answers and make necessary changes in grammar or spelling. Do not write till the last minute. Before submitting your paper always re-read it as this will enable you to catch places where you did not make your meaning clear and places where you can add to the thought or modify it.



Take a Sitting Hike

DURING a walk around the school grounds or in the woods, look for cool shady areas and warm open ones. Stop and sit quietly for 10-minute intervals to observe the animal life present and to gather information—temperature and the kinds and numbers of animals.

Record your findings on a data sheet. Dis-

cussions that might result from your observations could include:

- * Do the kinds and numbers of animals in cool shady habitats differ from those in warm, open ones?
- * Are the animals warm-blooded or cold-blooded?

Fun With Rickrack

Rickrack is back in fashion in a variety of gay colours and widths. You can make trendy headbands; tack it to material, thumbtack it to picture frames; glue it to lampshades or tennis shoes.



BANANA ICE CREAM

Ingredients: 3 bananas; 1 cup sugar; 1½ cups heavy cream, chilled.

Method: Mash the bananas. Heat the sugar in a saucepan with 2 tablespoons of water until the sugar dissolves. Stir together the sugar and mashed bananas and let the mixture cool. Stir in the heavy cream and chill the mixture for one hour. Then freeze it.



FRIED FISH BALLS

Ingredients: 500 gms boiled and flaked fish, 2 tbsps. cornflour; 1 piece minced ginger; 2 green onions (minced); salt and pepper to taste.

Method: Mash the fish and mix with the rest of the above ingredients. Knead to a smooth mixture. Form into small balls and deep fry to a golden brown colour. Drain well. Spear each ball between 2 slices of pickled cucumber on a toothpick. Serve with a sweet and sour sauce.

—N.A.V. Prasad, 6621
(2 Points)

Puzzles and Pastimes

MACARONI MONOGRAMS

MACARONI letters are great for initialing anything from belt buckles to notebook covers. Besides, they're cheap and easy to make!

Buy a packet of alphabet noodles. Press the letters firmly with glue on the articles desired. When dry, colour with water colours or nail polish.

You can also make desk or wall plaques by gluing letters on scraps of painted plywood. Or why not monogram vases, boxes and tins?

LITERARY MATCH

Match each of the items in the column on the left with the name of the literary character in the column on the right who is in some way connected with it.

- | | |
|-------------------|--------------------|
| 1. Glass slipper | a. Aladdin |
| 2. Pound of flesh | b. Rapunzel |
| 3. Silver lamp | c. Cinderella |
| 4. Wolf | d. Bluebeard |
| 5. Footprint | e. Shylock |
| 6. Key | f. Robinson Crusoe |
| 7. Hair | g. Robin Hood |
| 8. Arrow | h. Red Riding Hood |

(Answers on p. 46)

EGGSHELL VASE

YOU NEED: 1 empty eggshell (from which contents have been removed by shaking out from small hole, $\frac{1}{4}$ " or a little larger in diameter, made on the pointed end of shell), 2" circle of Styrofoam about $\frac{1}{2}$ " thick, paint, glitter, macaroni alphabet letters, glue.

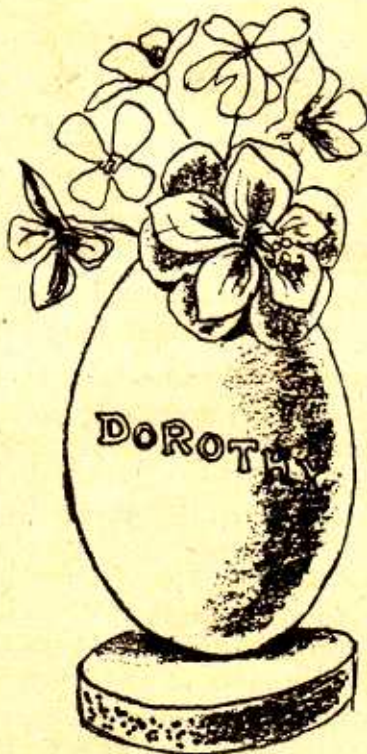
TO MAKE: Empty eggshells, rinse and drain. Paint the shells. Allow to dry.

In centre of the Styrofoam base, press foam down to make a shallow concave depression and glue in the round end of the coloured shell. Let dry.

Brush vertical sides of base with glue and sprinkle with glitter. Brush glue to form a border around the hole on top of the eggshell and sprinkle with glitter.

If the eggshell vase is to be used for a gift, the name of the recipient can be put on, using macaroni letters. Attach with white glue.

Eggshell vases will hold water, so fresh flowers may be used in them, but, of course, if plastic or other artificial flowers are used, water is not required.





REVISION

FROM June, 1977, SUNSHINE has carried specific articles on English Grammar and usage to help you to improve your spoken and written use of the language.

As a preparation for your school exam, here is a quiz on all those aspects dealt with in previous issues. If you are unsure of any particular unit, refer to the issue indicated in brackets, re-read the article and then attempt the question that poses a problem.

I. The Article (June 1977)

Fill in the blanks where necessary with A, AN, THE:

1. There is — fly in — lemonade.
2. — book on that shelf is — interesting one about — History.
3. He makes — toys of — wood and — tin.
4. Put — butter on — potatoes.
5. Take — umbrella with you, it may rain.
6. — birds can fly high in — sky.
7. — student at the back of the class is reading — newspaper.
8. — cats love — milk.

II. Reference: The Invaluable Verb (July, August, September, November 1977)

- a) Underline the verbs in this passage:

I have a strange neighbour. She borrows things all the time. She never buys anything. She even wanted the pair of gold earrings I usually wear. I was amazed. I told her so. All she did was laugh.

- b) Write out the following putting in the correct tense (Present Past or Present Perfect).

I (be born) in Vellore but (spend) most of my childhood in Madras. We still (live) there when my father (die). After that we (shift) to Nagpur; my mother (have) relatives there. They (live) there since 1968.

- c) Supply the correct Past Tense

He (discover) that he (lose) his book. He (buy) it yesterday when he (go) to school. The teacher (tell) him to go and search for it. He (do) so, but he (find, not) it when I (meet) him.

III. Nouns, Noun-Substitutes (January, February 1978)

Underline the Nouns and Noun Substitutes in this paragraph:

Walking is good exercise. It helps a person to maintain good health. Many working people and retired gentlemen take regular morn-

ing walks. They enjoy the cool freshness of the morning and take in the beauty of nature.

IV. Adjectives: (March 1978)

a) Improve the following passages substituting more accurate Adjectives for the over-worked one "nice":

It was a nice day. We had a nice time at the picnic. The food was nice. The place was nice. There was a nice little stream running through the ground.

b) Correct the following:

1. This bulb is more brighter than that one.
2. We have a cheapest and best battery.
3. Our car is new than his.
4. He is more tall than his sister.

V. Paragraph writing: (June, July, September 1978)

Expand the following sentences into paragraphs in order to narrate a story. Supply the ending and a suitable title:

1. Samant was returning late at night.
2. In the pathway there was a curious creature which looked like a big, black snake.
3. He rushed at it with a stick and hammered it hard to kill it.
4. To his surprise he found it was ...

VI Reading Skills (October, November 1978, January 1979)

Read about TIGERS from Encyclopædias, magazines like SUNSHINE, Science To-day, The Illustrated Weekly, Geography and science text-books. Try to answer these questions:

1. Where are tigers found today?
2. Are tigers man-eaters by nature?

A Chinese Fairy Tale

The Ten Farmers

MANY years ago there were ten farmers, who were all travelling together. They were surprised by a heavy thunderstorm, and all took refuge in a half-ruined temple. But the thunder drew ever nearer, and so great was the storm that the air trembled about them, while the lightning flashed around and around the temple in a great circle.

The farmers were all badly frightened, and decided that there must be a sinner among them, whom the lightning was trying to strike. To find out which one of them it might be, they agreed to hang up their straw hats outside the door. He whose hat was blown away would have to go outside and let himself be struck by lightning.

But one of the ten farmers protested. "Surely not one among us is without some sin," said he. "But if any one of us is without sin, surely that innocent man has no fear of death." But the others would not listen to him.

No sooner were all the hats outside, than one of them was blown away. Sure enough, it was the hat of the one farmer who had protested. Then all the others laughed, and pushed the unlucky owner out of doors without pity. But as soon as he had left, the lightning ceased circling, and struck the temple with a crash.



For the one that the rest had pushed out, had been the only really good person among them, and for his sake the lightning had spared the temple. Thus the nine evil farmers had to pay with their lives for their cruelty to their companion.

WINNERS OF THE CINQUAIN POETRY CONTEST

December 1978

BY YOU

Smile,
Sweet, Bewitching
Blossoming slowly, beautifully
Revealing perfect, sparkling teeth
Heart-stealer!

—*Veena Gurnani*, 3278



Pillow
Light, soft
Flowery, fragrant, familiar
Takes you to slumber-land
Dream-boat!

—*Sujatha Devadoss*, 10320

Soldier
Alert, Brave
Sacrificing his life
For his beloved country
Patriot!

—*Javed Khan* 4866/15

Sky
Azure, endless
Resting in peace
Dotted with fleecy clouds
Canopy!

—*Maureen Wong*, 5965



Tree
Large, evergreen
Rustling its leaves
Nodding at blowing wind
Donor!

Deep Buch 6561/188

Rockets and Missiles

ANCIENT records show that in 800 B.C., the Chinese, who were the first to discover gun-powder, were shooting powder-packed tubes on a stick into the air to amuse their people. These rockets followed all the 3 laws of motion propounded by Sir Isaac Newton.

However, it was mainly Newton's third law which was in effect. For every action there is an equal and opposite reaction. Thus, when the rocket's burning gasses *thrust downward*, the opposite reaction is a thrust upward, sending the rocket in a fiery arc into the night sky.

The real father of modern rocketry was the American, Dr. Robert Goddard, a Physics Professor. In 1900 A.D., he began experiments with rockets to send weather recording instruments higher than meteorological balloons had ever gone.

In 1926, the world's first liquid-propelled rocket was successfully fired at Auburn, Massachusetts, U.S.A. Rockets were first used in warfare in World War II, when Germany with the help of its V-2 rockets attacked London. This ushered in an age of long-distance, rocket-powered missiles that could carry nuclear warheads.

When jet planes began flying at twice the speed of sound, there was an insistent need for faster firing. In contrast to the 50-calibre bullet, the rocket with its fantastic velocity and destructive power was a partial answer to the problem. The electronic brain that is built into a rocket can easily outwit bombers and fighter aircrafts trying to escape it. Here are some examples. The FALCON is a 112 pound rocket that can outmanoeuvre and destroy aircraft at any altitude. The SIDE-

WINDER is a solid propellant rocket which strikes fast and is infra-red guided to its target.

When a lurking enemy submarine is located, surface-ships can fire a RAT (rocket assisted torpedo) towards the suspected area. The rocket hurls the torpedo in the direction of the target, a parachute lowers it into the water close by and a homing device guides it to the kill. This is how the U.S. Navy plan to use rockets in undersea warfare.

The first successful firing of a ballistic missile from underwater took place on July 20, 1969 when a POLARIS missile was fired from the U.S. nuclear submarine, George Washington.

The BELL X-1 (Rocket plane) piloted by Capt. Charles E. Yeager of the U.S. Air Force was the world's first manned aircraft to fly faster than the speed of sound on October 17, 1961. Joe Walker, a pilot for the U.S. National Aeronautics Administration set a new speed record in the X-15. The rocket plane achieved an incredible speed of 3,920 mph. (Six times the speed of sound).

The *Saturn* described as the world's largest rocket is 162 feet tall and weighs 925,000 pounds. It produces a thrust of 1,500,000 pounds at take-off. The first launching took place at Florida on October 27, 1961.

A rocket missile must attain a speed of 25,000 mph to escape from the earth's pull. This must be done with multi-stage rockets, each individual stage sending the missile farther into space and at increasing speed. When the last stage is fired, the missile should be travelling at 7 miles per second.

T. J. Alex, 6549

(3 Points)

Friendly Competition

I had just returned from school when the letter from my aunt Mira came. Aunt Mira is married to Uncle Ashok, who's my father's brother. She has a son almost exactly my age.

"Does she say anything about Ajay?" I wanted to know.

"I'll bet he was surprised to hear I'm trying out for the track team," I went on, grinning. "Of course, I was a little surprised myself."

"Sanjiv call your father!" Mum exclaimed suddenly.

"What's wrong?" I asked. "You're all excited."

She gave me a look, so I went and called Dad.

"Ajay does say hello, by the way," she said when I got back. "And he thinks it's wonderful that you're going out for track. He never has."

I nodded. "Yes, I know." It was probably the only sport Ajay hadn't tried, though. If there was ever a natural athlete, he was it. In fact, that had been the main reason I didn't object when Dad was transferred to Delhi. I wanted to get away from Ajay.

He was a nice fellow, and I liked him, but anything I could do, he could do better. It started in kindergarten and never stopped. After a while it gets sickening, no matter how nice the guy is.

Dad came in and Mum read part of the letter. It was pretty exciting news, all right. Uncle Ashok had been promoted and assigned to the Head Office in Europe, something he had always wanted.

"When are they leaving?" Dad wanted to know.

"Within the month," Mum said. "Mira wants to know if Ajay can stay with us and go to school here till the end of the year."

"Did you hear that, Sanjiv?" Dad whooped. "You and your cousin can be together again!"

"I can hardly believe it," I said, mustering all the enthusiasm I could, which wasn't much. "I suppose it will be a month or two before he'll be ready to come, though. Right?"

"Oh, no," Mum corrected. "If it's all right, I have to telephone Mira. They'll send Ajay as soon as possible. He can have the spare room, Mum continued. "I'll need both of you to help me, though, or it won't be ready."

"But, Mum," I told her, "I'm just getting to know some of the boys around here. They invited me to go to a hockey match this afternoon." She didn't realize that having friends of my own would have been a whole new experience to me.

"Well, if you've already made plans," she began.

"It wasn't definite," I admitted. "I guess it doesn't matter. I'll call Rohit."

Always before I had gone around with Ajay's friends, and I knew that they tolerated me because I was Ajay's cousin. And the few times I had made some friends of my own—usually when he was away on a trip—they would suddenly become his friends when he returned.

It was that way with everything. I tried out for the football team because Ajay said it was the thing to do. The fact that he made

the team and became star halfback, while I was lucky to have a uniform assigned to me, never seemed to matter to anybody. To Ajay it was "friendly competition" and fun. But he didn't know what it was like to lose every time. It took the "fun" out of the friendly competition, even if I never let anybody know.

* * *

Ajay arrived. After the customary round of hugs, kisses, and handshakes—he almost broke my hand, as usual—Ajay glanced



around and said, "Boy, I like it here already. The weather's great!"

Then we were off to the car. Ajay, Mum and Dad talking so fast that I didn't have to join the conversation. It was fine with me.

"Hey, Sanjiv," Ajay said suddenly. "What's this I hear about you trying out for the track team?"

I smiled in spite of myself. "Yes, that's right. Tryouts are next week. The coach says I have a pretty good chance to make it."

"I wonder if he'd let me try out," Ajay replied. "I never ran track at home but it might be fun to take a crack at it. Friendly competition—right?" He squeezed my shoulder lightly.

"We can check tomorrow, if you're really interested."

"Interested?" he repeated. "I sure am. That's the only way to get in at a new school—involvement."

The drive home was the first in a series of shattering experiences. I was in the car, but I could have been in another world as far as Mum and Dad were concerned. Of course it was only natural that they would want to hear about Ajay's parents but it still bothered me. I had become used to being the centre of attention with them. Now the spotlight had shifted, and I knew it would be a permanent shift for as long as Ajay stayed with us.

☞ (over)

The second shattering experience came the next morning when Ajay joined school. He and I were not only in the same class, but also in the same division. Ajay was thrilled.

It was just as I expected. Ajay was not shy, when the teachers asked him to introduce himself. Even before he stood up the kids were looking at him as if they would like to get to know him better.

He was funny, but just enough, and he mentioned sports and other things that they wanted to hear. Then he'd glance at me and say, "I'm Ajay's cousin." Everyone looked at me with new respect. It was a weird feeling.

Shattering experience number three occurred when I asked the coach if it wasn't too late for Ajay to be considered for the track team.

Mr. Ramanathan said, "Anybody can try out."

"I'd like to start training right now," Ajay told him.

"By the way, Sanjiv you did well on Friday," Mr. Ramanathan said. "Keep at it."

That kind of praise normally would have boosted my spirits, but not now. And one look at Ajay's powerful legs a few minutes later made me feel even worse. "I'll race you out to the field," Ajay challenged.

"I—I'm not ready yet," I said. "You go on. I'll be out in a minute."

Sooner or later I knew we would be racing against each other in "Friendly Competition," but I wanted to put it off as long as possible.

Coach Ramanathan was clocking some of the guys when I finally reached the field. Ajay was talking to him and it wasn't hard to tell that they were getting along like old friends.

"Sanjiv," the coach called out, "let's clock you and your cousin in the 400."

"I feel a little stiff today," I said.

"It's just for fun," Ajay reminded me. "I want to see what you can do."

Half-heartedly I got into position next to Ajay. What's the sense in racing when it's obvious who the winner will be, I asked myself. Ajay looked confident as he moved his

body into position.

The signal was given and we took off, Ajay streaking ahead. I gave up right then. I had never beaten Ajay at anything, why should track be different?

"You call that running?" Ajay laughed when I finally crossed the finish line. "I've seen faster turtles!"

"Anything wrong, Sanjiv?" Coach Ramanathan wanted to know.

"I—I guess I'm tired," I interrupted. "In fact, I don't feel much like working out today. I'll see you later, Sir. See you at home, Ajay."

"Wait a little while and I'll go with you," Ajay said. "I don't want to overdo it on the first day."

"No, I'm going now," I told him.

He didn't seem to realize that I wanted to get away from him.

The next two days were miserable. I avoided being around Ajay as much as I could. I thought that being away from Ajay would make me feel better.

On Thursday afternoon I walked into the deserted locker room. If I put away my equipment, it might be easier to forget that I had planned to break the local records for the 400 and 800. Or at least that's what I told myself.

The coach's voice was coming from the gym office. My ears perked up when I heard the name "Gupta."

"He's our man," the coach was saying. "I'm almost sure of it."

I shook my head. I wasn't a bit surprised. I knew Ajay would make the team.

"I thought so too until this week," the assistant coach's voice said. "He hasn't been out since Monday."

I frowned. If Ajay had stopped working out, it was news to me.

"He hasn't been feeling too well, that's all," Coach Ramanathan continued. "Of course, nothing's definite until the tryouts on Monday, but he's my choice."

"How about this new Gupta?" the other

voice asked. "Personally, I'd pick him over the other one."

"He comes on strong, and he'll be fine for sprints and relays with a little more training, but he can't seem to pace himself for distance. It may be the extra weight, but I clocked him last Monday. He didn't come close to the time Sanjiv had last Friday."

I froze momentarily as his words sank in. I had beaten Ajay in something!

I changed into my workout clothes as fast as I could.

Suddenly, I stopped. I had been ready to give up without even trying. I just assumed Ajay would beat me as he always had before.

But had he always beaten me before? Had he beaten me all the times I thought he had, or did I just give up because I thought he would? And I hadn't been trying against Ajay at all.

"Who's out there?" the coach wanted to

know as I slammed the locker shut.

"It's me—Gupta," I replied. "I'm a little late."

He came to the door. "Are you feeling o.k. Sanjiv?"

I looked at him and grinned. "I feel great, Sir. Excuse me, I have to get out on that track and make up for the days I've missed."

"Good. We're expecting a lot from you."

"I'll do my best," I promised.

They weren't just empty words, I decided as I jogged out to the field. And they didn't apply just to track, either.

Ajay was resting when I reached the field. "Hey, Cousin—race you round the track!" I yelled.

Ajay was off like a shot, just as before. But this time I didn't give up. I kept my steady, reliable pace and slowly the gap between us closed.

It was only the beginning.

gain confidence
be happy?
make progress?
gain popularity?
want success?

Want to succeed? ... and be a bigger, better and brighter person? Yes? Then, these warm, wise and witty words, from a friend of youth, are meant especially for YOU.

READ

HOW TO SUCCEED

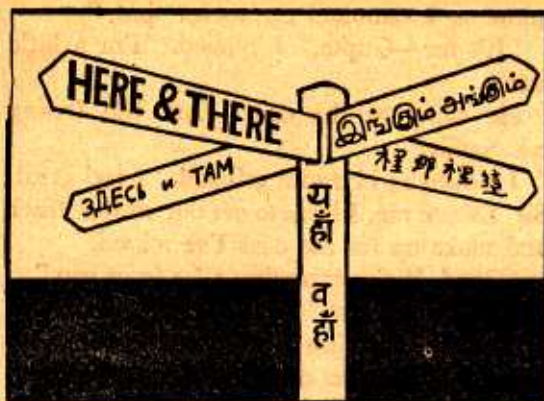
A SUNSHINE PUBLICATION—THE HALLMARK OF GOOD READING

Sunshine, Pooma 1

by
G. S. Krishnappa

Price: Rs. 1.50
Special Rate for Subscribers: Re. 1.





HOPE FOR WORLD'S LARGEST SEA TURTLE

A field officer of the Madras Snake Park has found several nest sites and a few dried-out eggs of the Giant Leatherback Sea Turtle on the beach of a small island in the South Andaman Group in the Bay of Bengal.

This is considered very important because the last confirmed sighting of eggs of the Giant Leatherback Sea Turtles was on the Kerala Coast near Quilon around 1928! Then the eggs were collected for human consumption and the adults killed for the oil. Now these turtles are strictly protected under the Indian Wildlife Act.

The Giant Leatherback Sea Turtle grows to a length of 2.5 metres and can weigh as much as 1000 kg. The female comes ashore in the early months of the South-West Monsoon to lay its eggs. She is cumbersome on land and struggles up the beach to use her hind flippers to dig a hole 75 cm. deep where she lays about 120 soft, white eggs, each about 50 mm. in diameter.

The Madras Snake Park Trust was established in 1971. Among its other activities it takes up the surveys of rare and endangered reptiles. Then it reports to the Government

and the public on the status and potential value of these reptiles. Sea turtles can become a source of meat, leather, oil and shell, but only if their numbers can be first increased to a safe level. It has proven very profitable to breed crocodiles, for instance; maybe this can be done with turtles later?

Adapted from WWF-India.

I. Y. C. SNIPPETS

- * Sikkim has announced that it will supply school uniforms to all poor and needy children, and provide clean water supply and latrines in all schools.
- * In Meerut a new school will be opened which will give free board and lodging and training to children who have got into trouble with the law. There are already such schools in U. P.
- * Haryana will give special medical care to over 18,000 children and help 400,000 children with school meals.
- * The Young Women's Christian Association (YWCA) has decided to bring a little light into the lives of slum children living in cities. They have no playgrounds; they live in dirty, crowded slums; they have to work at an early age since their families are so poor. If they go to school they have no place to do their homework and no one to help them with it.
The YWCA movement will have programmes and special projects to help these children.
- * The Rural Development Department is planning a tree-planting programme in 600 blocks around India. UNICEF is helping the programme. In each block, 400,000 trees will be planted by children. The bigger children will be asked to nurture and care for their own saplings.

sunshine - EAGLE FLASK QUIZ CONTEST

MATHEMATICS

Compiled by A. S.

- I. Pair off the numbers given in the left column with the precise name as in the right hand column:

a. 4, $2/3$, $3/5$, 6	mixed
b. $2\frac{1}{4}$, $4\frac{1}{2}$, 5.	even
c. 2, 4, 6, 8, 10, 12	composite
d. 2, 3, 5, 7, 11, 13	rational
e. 1, 3, 5, 7, 9, 11	imaginary
f. 4, 6, 8, 9, 10, 12	complex
g. $3+2\sqrt{-1}$	ordinal
h. 1st, 2nd, 3rd, 4th	odd
i. $\sqrt{-2}$, $\sqrt{-7}$, $\sqrt{-5}$	prime
- II. Explain why the circles mentioned below are so named:

a. Inscribed	c. Nine point
b. Circumscribed	d. Great
- III. What are the characteristics of these different triangles:

a. Equilateral	d. Petal
b. Isosceles	e. Spherical
c. Scalene	
- IV. What are the following numbers

a. CXLIV	b. CD
c. MDLXVI	
- V. What particular geometrical shapes are associated with:
 1. a 'diamond' on a playing card.
 2. the cell in a honeycomb
 3. the boundary of the liquid surface in a tilted tumbler of liquid
 4. the Earth
 5. the constellation Pegasus
 6. a lined well
- VI. Given below are the names of famous mathematicians. What is their contribution to mathematics?

a. Archimedes	d. Mercator
b. Pythagoras	e. John Napier
c. Euclid	
- VII. Complete the following

a. 81, 27, —, 3, -1, —
b. 17, 15, 26, 22, 35, 29, —
c. 2, 6, 12, —, 30, —

Send your answers to these questions on a separate sheet together with the coupon. Three lucky all-correct winners get Eagle Flasks. Upto 4 points will be awarded on merit to the rest of the winners.



SUNSHINE-EAGLE FLASK CONTEST

Name: _____

S.R. No.: _____

Address: _____

Last Date: March 31



You Ask —We Answer

Are you sometimes puzzled about the why and how of things around you? We shall answer your questions in this section. Those of practical interest and utility, answers to which cannot be found easily, will be given preference.

Send your questions, mentioning your SR No. to: 'You Ask—We Answer', Sunshine, Poona 9.

It was stated that the position of the planets after Saturn (i.e. Uranus, Neptune and Pluto) was calculated before they were seen through the telescope for the first time. Can you describe what was that calculation and how it was done?

—Moses I Pezarkar 1422

Saturn was the outermost planet known to the ancients. No thought to the possibility of a more remote planet was given till William Herschel's discovery of Uranus in 1781, which came as a major surprise to the scientific world. Herschel's discovery was not because of any particular search for a new planet, but was in the course of his observations of the heavens. He came across an object which was certainly not a star and he did not realize at first what it was. He mistook it for a comet, but a few week's observation proved its true nature.

The story of Neptune's discovery is one of the most interesting in astronomical history, since the planet was tracked down before it was actually seen. Between 1781 and 1830, mathematicians found that the new planet Uranus was wandering from its predicted path; it was not moving as it should do, and an amateur, the Rev. J. J. Hussey, suggested that the cause of the trouble might be an unknown body, pulling on Uranus and dragging it slightly away from its expected position. Two investigators, one in England and another in France, set themselves to work out the position of the disturbing body. Their results enabled two German astronomers to identify the new planet very close to the position that had been indicated.

With the discovery of Neptune, the Solar System was once more regarded as complete. Yet the movements of the outer planets were still not in full agreement with calculation; and Percival Lowell, famed for his studies of the Martian Canals, undertook to work out the position of a ninth planet. Lowell had no success. He died in 1916, but the search was continued at his observatory. Fourteen years later, Clyde Tombaugh detected a dim, starlike object which proved to be the missing planet. It was christened Pluto, and the name is apt; Pluto was King of Darkness and the world named after him must be a dismal, twilight place with the Sun looking like nothing more than a tiny candle far away.



PLEASE NOTE!

The current SUBSCRIPTION rates are:

School Library:	Rs 18 for one year	Individual:	Rs 12 for one year
	Rs 34 for two years		Rs 22 for two years
Bulk Rate	(special concession on 10 or more copies):		Rs 10 for one year

placed his hands upon our shoulders and we obeyed him: we stretched out upon the sand. Race, language, religion were forgotten. There was only this humble nomad with the hands of an archangel on our shoulders.

Face to the sand, we waited. And when the water came, we drank like calves with our faces in the basin, and with greediness which alarmed the Bedouin so that from time to time he pulled us back. But as soon as his hand fell away from us we plunged our faces anew into the water.

* * *

You, Bedouin of Libya who saved our lives, though you will dwell for ever in my memory, yet I shall never be able to recapture your features. You are Humanity and your face comes into my mind simply as man incarnate. You, our beloved fellowman, did not know who we might be, and yet you recognized us without fail. And I, in my turn, shall recognize

you in the faces of all mankind. You came towards me in charity bearing the gift of water.

This is the end of my story. Lifted on to a camel, we went on for three hours. Then, broken with weariness, we asked to be set down at a camp while the cameleers went on ahead for help. Towards six in the evening a car manned by armed Bedouins came to fetch us. A half-hour later we were set down at the house of a Swiss engineer named Raccaud who was operating a soda factory beside saline deposits in the desert. He was unforgettably kind to us. By midnight we were in Cairo.

I awoke between white sheets. Through the curtains came the rays of a sun that was no longer an enemy. I spread butter and honey on my bread. I smiled. I recaptured the savour of my childhood and all its marvels. And I read and re-read the telegram from those dearest to me in all the world whose three words had shattered me:

"So terribly happy!"

THE END

Sunshine Points System

Only REGISTERED SUBSCRIBERS (your S.R. No. is printed on the top of each wrapper) can win points for the following:

- * Contributions accepted and published in the BY YOU Section.
- * Reports from Special Correspondents.
- * Answers to "Think and Write" exercises.
- * Winning essays or poems in SUNSHINE contests.
- * Correct Solutions to Quizzes.

In each case we announce, in advance, the number of Points awarded. We keep the scores of all who win Points. In August every year we encash the points of those who have accumulated 10 points and over. Each is worth 25 paise. The points of those who have less than 10 are carried over into the next year.

So, send in your solutions, BY YOU contributions, reports and replies and see how many points you can collect before August '79.

DO NOT FORGET TO QUOTE YOUR S.R. NO. WITH EACH ENTRY YOU SEND.



Points Winners

December 1978

SUNSHINE-EAGLE FLASK QUIZ CONTEST 1978

1st Prize: SANJEEV SADANA, 5645, New Delhi

2nd Prize: AVNISH KUMAR, 6408, Pune

3rd Prize: YESHWANTH KINI, 9958, Bombay

4 Points: Joydeep Mukerjee 5858, Bhagyanath D. 5480, Achyut Roy 977/30, M. Vasmi Abidi 10225

3 Points: Olivia D'Cruz 2934/63, Sri Lata Raman 6659, Vinay Khandelwal 9475, Narendra Wagh 977/18, Vicraj Thomas 9798, C. R. Rajesh 10222, Dipak M. Bhatt 10187, Malini Panchapagesan 1057/3, Pawan Kumar Biyani 5810, House Captain 6463, Mini B. Mahajan 6231, Atmaram Iyer 1930/4, Rajgopal R. Gopal 6561/138, Rajat Kudchadker 977/16, Sharat Kumar Singh 3098, Meera Dayanidhi 10175, Pragya Shrivastav 7799/16, Chetan Shetty 6440, Sangeet Kukreja 6561/36, Nandini Sethuraman 9314, Gabriel Pereira 977/81, T. J. Alex 6549, Sunil Shroff 977/2, Purnima Kochikar 6320, Ranjan Kumar 6677/22

2 Points: Rajani V. 3438/21, A. Saleem 6418, Jyoti Nath 9462, Prakash Peres 9663, Partha Sarker 977/78, Riju Kumar Mittal 977/52, Maureen Wong 5965, Vijayantha Kapil 5807, Abhijit Kothari 9321, Hitesh Merchant 6032, Kaizar Halim 1930/14, Geeta Chhabria 2934/7, Avijit Mandal 6677/110, Geetanjali Naidu 2934/96, Avani Shah 2934/75, Joseph Viegas 10064, Lakshmi Ratnam 10138, Sachin Galgalikar 6380, B. Vasu 977/47, Vinita Joshi 5483, Anil Kumar P. 6441, Mohd. A. Abedin 4584/47, Joyanta Ghosh 7798/52, Ajay Tiwari 6357, Ranjan Kumar 10124, Kavita Chadha 2934/47, Lavita Sequeira 2934/46, Javed Khan 4866/15, Vinoo Johar 5860, Anushila Mishra 10094, Prakash Joshi 10057, Punam Gidh 5895, Arti Mankani 2934/46, M. S. Balakumar 2964, Milan Chatterjee 8756, Jayapaul Lazarus 2172, Aseem Chakraborty 7799/74, K. Uma 9952, Shailaja Nair 1103/FR, Ayaz Fazulbhoj 10110, Anastasia Chettiar 5476

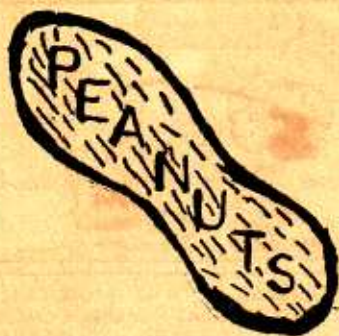
1 Point: Jessy Thomas 10058, Vineesh Mathur 2542, Dhruva J. Ghose 7799/40, Jayantha Baral 4585/45,

Suresh Kumar 6092, Apurba Baral 4585/3, Kamal Sapra 9447, Shobhana Mathia 2934/5, Anita Lalla 10201, Lakshman Kaushik 5687, Ajit Sidhu 6030, Rakesh Garg 5858/19, Sanjay Lambu 977/17, Dipak Ray 4585/22, Rajib Bhattacharjee 799/73, Juliet D'Souza 2934/43, D. Henavalty 3639/17, Tarun Ahuja 6633, Rajesh Ajwani 10072, Kashyap Chudasama 977/22, Kirti Prabhu 4866/50, Rajesh Bhat 977/51, Jawahar S. Verma 6632, Rajesh Chada 977/61, Sanjay Jindal 10084, Prince Paul 6432, Pravin Patel 3129, Sudhaker Xalxo 3116/1, Veena Gurnani 3278, Swati Bajpai 2934/34, Renuka Nair 2934/50, Mini Nair 7799/72, Sangeeta Karmakar 10060, Samir Grover 977/19, Suresh Gopinath 6188, Vidya Ananthanarayanan 2934/29, Vincent D'Souza 906/15, Prafull Jain 6168, Usha Sagar 2934/19, Nirja M. Sheth 656/22, Moses I. Pezarkar 1422, Govindan Gopinath 10055, Jennifer Fernandes 2934/44, Merchant P. J. 9386, Chaitanya Parikh 656/78, Lata Pillai 2934/74, Narayan Ramesh 977/5, Rita D'Souza 2934/62, J. N. Sampat 9459, T. T. Mathews 5683, P. Joseph George 5963, Uma Nair 2717, Neeta Keswani 6594, Mridula Roy 6561/28, Binal Malavia 2934/48, Kamaljeet Kaur 2934/66, Marion DeSylva 4760/1, Deepti Santram 6041, Nilu Vir 5857, Pradeep Srinivasagam 5674, Rajiv Shory 4585/5, Christopher D'Souza 10087, R. Anuradha 5997, Anita Goyal 2934/12, Lancelot D'Cunha 906/5, Bhavana Thakkar 2934/69, Nitin Radia 5585, C. Shivkumar 2098/4, Alan Noronha 6677/93, Prabir Gupta 4585/10, Smita Dighe 6354

Winners of the Cinquain Poetry Contest

3 Points: Veera Gurnani 3278, Maureen Wong 5965, Sujatha Devadoss 10320, Javed Khan 4866/15, Deep Buch 6561/188

Please quote your SR Number (given on your magazine wrapper) while renewing your subscription and in all correspondence with us.



Good ol'
CHARLIE
BROWN

his very
clever dog,
SNOOPY,

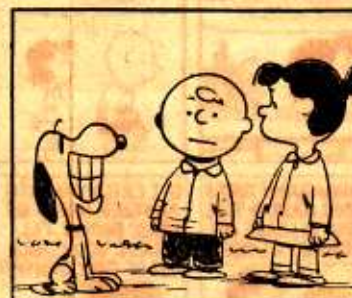


VIOLET,
a school
chum,

his
conceited
neighbour
LUCY,



and her
younger
brother
LINUS



PEANUTS

featuring
"Good ol'
Charlie Brown"
by SCHULZ



YOU WANTED
ME, MANAGER?



I SURE DO..



I THINK YOU NEED A LITTLE
PRACTICE ON FLY BALLS, LUCY,
SO IF YOU'LL GET OUT THERE,
I'LL HIT YOU A FEW...



JUST TROT ON OUT THERE,
AND I'LL HIT SOME HIGH ONES,
AND WE'LL SEE HOW YOU DO...



WELL, GO ON! GET OUT THERE
BEFORE I HIT ONE AND YOU
HAVE TO CHASE IT!



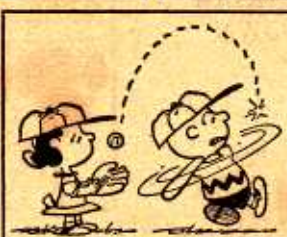
I'M WARNING YOU.. I'M NOT GONNA WAIT!
I'LL JUST GO AHEAD AND WHACK ONE SO
FAR YOU'LL HAVE TO RUN FIFTY MILES!



GO AHEAD! GET MOVING! GET OUT
THERE BEFORE I SWING BECAUSE
I'M NOT WAITING ANOTHER SECOND!



YOU'D BETTER
START MOVING..
HERE IT GOES!!



© 1977 by United Feature Syndicate, Inc.



BOY, I'VE SEEN
YOU LOOKING DEPRESSED,
BUT I'VE NEVER SEEN YOU
LOOKING THIS DEPRESSED!



IN A
RAT!



I FEEL TERRIBLE!
I HATE MYSELF!!



I WAS SITTING ON THE FLOOR
WORKING A PUZZLE AND MY LITTLE
BABY SISTER CAME CRAWLING OVER SHE
MESSED IT UP AND I YELLED AT HER AND
SHE CRIED...AND I HATE MYSELF!



I SHOULDN'T HAVE
YELLED AT HER... SHE'S
ONLY A BABY... I FEEL
TERRIBLE!



I UNDERSTAND WHAT YOU'RE GOING
THROUGH, CHARLIE BROWN... DON'T FORGET
THAT LINUS WAS A BABY ONCE, TOO... I
HAD THE SAME PROBLEM... I USED TO
FEEL THE SAME WAY THAT YOU DO...



HEY! IS THAT MY COMIC
BOOK YOU'RE READING?



HOW MANY TIMES
DO I HAVE TO TELL
YOU TO LEAVE MY
THINGS ALONE?!



IF I CATCH YOU WITH
ANOTHER ONE OF MY
COMIC BOOKS, I'LL
CHASE YOU CLEAR
OUT OF THE COUNTRY!



...BUT I GOT
OVER IT!

REMEMBER CADER

by C. S. Anton Fernando



It is rather a difficult thing to get workers to heed safety warnings at their work places however strongly they may be worded. The ingenuity of the Site Superintendent at a contractor's worksite, however, produced the desired result.

An Insurance Representative was being shown round a worksite by the Site Superintendent during a survey of the risks for insurance. The former was intrigued by a sign above a complex piece of machinery which read: "Remember Cader!" The Insurance Representative enquired of the Site Superintendent what it meant when the latter related the story:

"Earlier", said the Site Superintendent, "there was a board there that warned workers from attempting adjustments to the machine while it was in motion. 'Cader', he went on, "did exactly what he was warned against. He paid the penalty by having to have his hand amputated at the wrist after his hand got caught in the machine. The new warning introduced thereafter had proved quite effective. Everyone who knew the fate of Cader, and his disregard for the earlier warning, now faithfully observed the rule," he concluded.

STATEMENT

About ownership and other particulars
Published under Rule 3 of the Registration of Newspapers (Central Rules, 1956)

SUNSHINE

- | | |
|---|--|
| 1. Place of Publication: | 6. Parvati Villa Road, Poona 1. |
| 2. Periodicity of its publication: | MONTHLY |
| 3. Printer's Name, Nationality & Address: | V. Raju, Indian, Salisbury Park, Poona 1. |
| 4. Publisher's Name, Nationality & Address: | V. Krishnayya, Indian, 6, Parvati Villa Road, Poona 1. |
| 5. Editor's Name, Nationality & Address: | V. Krishnayya, Indian, 6, Parvati Villa Road, Poona 1. |
| 6. Names and addresses of the individuals who own the newspaper and partners or shareholders holding more than one per cent of the total capital: | The Registered Non-profit Public Trust, The Children's Sunshine Concerns.
6, Parvati Villa Road, Poona 1. |

I, V. Krishnayya, hereby declare that the particulars given above are true to the best of my knowledge and belief

Date: March 1-2-79

(Sd.) (Mrs. V. Krishnayya)
(Signature of Publisher)



Wife: There are a lot of mistakes in the cookery book.

Husband: Yes, dear, I know; I've tasted them.

* * *

Teacher: Robert Burns wrote "To a Field Mouse".

Student: I'll bet he didn't get an answer, Sir.

* * *

An old lady went to the post office to mail a parcel, and fearing she didn't use enough stamps, she asked the clerk to weigh it.

After weighing it the clerk told her she'd actually used too many. "Oh, dear," she said "I do hope it won't go too far."

* * *

Ashok, who was better in arithmetic than in spelling, was at the blackboard trying to spell a word. Meaning to be helpful, a classmate said, "Just add e." Ashok looked irritably over his shoulder and said, "I am not adding. I am spelling."

* * *

An English class was asked to write four lines of dramatic poetry. From the results, the teacher chose Shashi's and read it to the class: "A boy was walking down the track;/the train was coming fast;/the boy stopped off the railroad track/to let the train go past." This is very well done," commented the teacher, "but it lacks the dramatic element. Try again."

In a short time this is what Shashi produced: "A boy was walking down the track;/the train was coming fast;/the train jumped off the railroad track/to let the boy go past!"

A salesman in a shop was serving a customer. The manager was at his desk some distance away, but he overheard the salesman say, "No, madam, we haven't had any for a long time."

"Oh, yes, we have," interrupted the manager; "I will send my man to the warehouse and have some brought over for you."

The lady went out laughing. The manager turned to the salesman: "Never refuse anything; always send for it."

"Well, you see," replied the salesman, "she said to me, 'We haven't had any rain lately.'"

* * *



First Boy :My dad made a scarecrow that was so natural that it frightened every crow off the field.

Second Boy: That's nothing! My dad made one that scared them so much, they brought back the potatoes they had taken!

* * *

ANSWERS TO PUZZLES & PASTIMES

Literary Match: 1. c; 2. e; 3. a; 4. h; 5. f;
6. d; 7. b; 8. g.

A RIDDLE

My first is in riddle, but not in joke
My second is in frog, and also in croak
My third is in little, but never in big
My fourth is in a sheep, and also in a pig
My fifth is in happy, but never in smile
My sixth is in a minute, and also in a while
My seventh is in insect, but not in a bee
My whole is a fish that leaps out of water

WHAT AM I?

—T. J. Alex, 6549

(1 Point)

NIHDLIO A
Answer

ATTENTION SUBSCRIBERS

1. Entries to quizzes and contests, 'Think & Write', By You contributions; requests for printing names in the Pen Friends section, Puzzles, etc. should be sent on separate sheets. Each entry must have both your name and SR number. It is not enough to write your name and address on the envelope alone.

Entries of those disregarding the above rules will not qualify for Points.

2. Mention your name, AGE, address and interests clearly for the Pen Friends section.

3. Whenever you are entitled to receive stamp packets, remember to send a self-addressed stamped envelope.

HOW WELL HAVE YOU READ THIS ISSUE ?

State whether the following are 'true' or 'false', giving reasons for 'false' statements. Send your answers to "Contests, Sunshine, Poona 9". The entry should be on an independent sheet, mentioning clearly name and SR Number. 2 Points for correct entries, 1 Point for one-error entries. Last Date: March 31

1. Golda Meir mostly made impromptu speeches.
2. Beginning an exam as soon as you get the question paper will give you sufficient time to revise the paper.
3. We can look forward to Giant Leatherback Sea Turtle eggs and oil in the near future.
4. The YMCA is supporting a tree-planting programme for children this year.
5. The mridangam and tabla are solid instruments.
6. Bole is is to Hindustani music, what sollu is to Karnatic music.
7. All Cinquain poems have ten lines.
8. If your little brother eats a whole bottle of homoeopathic pills you should rush him to the hospital.
9. Sulphur 30x is prepared according to the centesimal scale.

LAST MONTH'S QUIZ

1. False (They form three-fourth of all the children, in all age-groups, living below the poverty line).
2. True.
3. False (The sand was covered by black pebbles).
4. True.
5. False (It delineates the rhythmic structure of the music).
6. False (Reference books, magazines, etc. will give you the more recent developments and activities in any field that you wish to research).

CLOSING THOUGHT

Education should be used not to get rich but to enrich others.

